

ARKHANGEL'SKIY, Nikolay Konstantinovich; YEVSTIGNEYEV, Konstantin  
Nikitovich; TOMASIPOL'SKIY, Leonid Markovich; SEROVA, Ye.I.,  
vedushchiy red.; POLOSIKA, A.S., tekhn.red.

[Techniques and economics of electric drilling] Tekhnika i  
ekonomika elektrobozreniya. Moskva, Gos.nauchno-tekhn.izd-vo  
neft. i gorno-toplivnoi lit-ry, 1959. 120 p. (MIRA 12:11)  
(Oil well drilling--Equipment and supplies)

LISICHKIN, S.M., doktor ekonom.nauk, glavnnyy red.; PROSKURYAKOV, A.V.,  
kand.tekhn.nauk, red.; ARUTYUNOV, N.B., red.; TOMASHPOL'SKIY,  
L.M., red.; POPOV, I.V., kand.ekonom.nauk, red.; CHUKERASHVILI,  
Ye.V., kand.ekonom.nauk, red.; DENISOVA, L.L., red.; DOBRITSYNA,  
R.I., tekhn.red.

[Belgium; brief economic-statistical survey] Bel'glia; kratkii  
ekonomiko-statisticheskii obzor. Moskva, 1959. 125 p.  
(MIRA 12:11)

1. Akademiya nauk SSSR. Institut nauchnoy informatsii. 2. Vse-  
soyuznyy tsentral'nyy nauchno-issledovatel'skiy institut chernoy  
metallurgii (TsNII Chermet) (for Arutyunov).  
(Belgium--Economic conditions)

LISICHKINA, S.M., obshchiy red.; TOMASHPOL'SKIY, L.M., obshchiy red.; CHUTKERASHVILI, Ye.V., obshchiy red.; KARYAGIN, I.D., red.; KIR'YANOVA, Z.V., red.; MATVEIEV, P.V., red.; MATORIN, A.I., red.; POPOV, I.V., red.; POPOV, N.N., red.; PROSKURYAKOV, A.V., red.; SOKOLOV, Yu.S., red.; STUPOV, I.D., red.; BELYAVSKIY, A.M., red.; GRAZHUL', V.S., red.; DANILOV, N.N., red.; RAKHMANINOV, G.I., red.; SHEVCHENKO, G.A., tekhn.red.

[Development of the national economy of the German Democratic Republic] Razvitiye narodnogo khoziaistva Germanskoi Demokratischeskoj Respubliki. Moskva, Proizvodstvenno-izdatel'skii kombinat VINITI, 1959. 906 p. (MIRA 13:4)

1. Akademiya nauk SSSR. Institut nauchnoy informatsii.  
(Germany, East—Economic conditions)

PROSKURYAKOV, A.V., kand.tekhn.nauk, red.; POPOV, I.V., kand.ekonom.nauk, red.; TOMASHPOL'SKIY, L.M., kand.ekonom.nauk, red.; GOLOVINSKIY, G.P., kand.tekhn.nauk, red.; SOKOLOV, Yu.S., kand.ekonom.nauk, red.; CHUTKERASHVILI, Ye.V., kand.ekonom.nauk, red.; BERMAN'YEVA, S.I., red.; ZAKHAROVA, L.S., red.; KOLCHINA, V.I., red.; POSPELOV, Yu.S., red.; SMERTINA, N.I., red.; SOBOLEVA, N.M., tekhn.red.

[Great Britain; economic survey] Velikobritaniia; ekonomicheskii obzor. Moskva, 1960. 658 p. (MIRA 13:5)

l. Moscow. Vsesoyuznyy institut nauchnoy i tekhnicheskoy informatsii.

(Great Britain--Economic conditions)

YEVSTIGNEYEV, R.N.; STUPOV, A.D., kand.sel'skokhoz.nauk, red.; TO-MASHPOL'SKIY, L.M., kand.ekon.nauk, red.; SMIRNOVA, A.I., vedushchiy red.; GONCHAROV, N.G., tekhn.red.

[Economic development of the Czechoslovak Republic] Razvitie ekonomiki Chechhoslovatskoi Respubliki. Moskva, Vses.in-t nauchn. i tekhn.informatsii. 1960. 99 p. (MIRA 13:6)  
(Czechoslovakia--Economic conditions)

TOMASHPOL'SKIY, L.M.

Petroleum refining and petrochemical industry of Italy.

Khim. i tekhn. topl i masel 9 no.8, 66-70 Ag '64.

(MIRA 17:10)

TOMASHPOL'SKIY, L.M.

Development of the gas industry in the Rumanian People's  
Republic. Gaz. delo no. 5:40-43 '64 (MIRA 17:7)

1. Vsesoyuznyy institut nauchnyy i tekhnicheskoy informatsii.

POPOV, Ivan Vasil'yevich; TOMASHPOL'SKIY, Leonid Markovich;  
KANEVSKAYA, T.M., red.; SEMENOV, L.V., red.; GERASIMOVA,  
Ye.S., tekhn. red.

[The fuel power supply of the world socialist system] Toplivno-energeticheskaya baza mirovoi sotsialisticheskoi sistemy. Moskva, Izd-vo "Ekonomika," 1964. 269 p. (MIRA 17:3)

BRONZOV, Anatoliy Samsonovich; TOMASHPOL'SKIY, L.M., red.; DUBROVINA,  
N.D., ved. red.; YAKOVLEVA, Z.I., tekhn. red.

[Multiple drilling in oil and gas fields] Kustovoe stroitel'-  
stvo skvazhin na neftianykh i gazovykh promyslakh. Moskva,  
Gostoptekhizdat, 1962. 327 p. (MIRA 16:4)  
(Oil well drilling)

TOMASHPOLSKIY, L.M.

NIKOLAEVSKII, N.M., TOMASHPOLSKIY, L.M., VAYNER, I. YA., BREKER, M.M.,  
LVOV, M.S.,

Economic aspects of prospecting and development of oil fields in the USSR

Report to be submitted for the Sixth World Petroleum Congress, Frankfurt  
16-26 June 63.

BRONZOV, Anatoliy Samsonovich; TOMASHPOL'SKIY, L.M., red.; DUBROVINA,  
N.D., ved. red.; YAKOVLEVVA, Z.I., tekhn. red.

[Multiple drilling in oil and gas fields] Kustovoe stroitel'-  
stvo skvazhin na neftianykh i gazovykh promyslakh. Moskva,  
Gostoptekhizdat, 1962. 327 p. (MIRA 16:4)  
(oil well drilling)

UDYANSKIY, Nikolay Yakovlevich, PALIY, P. A., and TOMASHPOL'SKIY, L. M.

Tekhnika i tekhnologiya burenija neftyanykh i  
gasovykh skvazhin v shestoy pyatiletke [by] N. Ya.  
Udyanskiy, P. A. Paliy [and] L. M. Tomashpol'skiy.  
Moskva, Gostoltekhgizdat, 1957.  
127 p. illus., diagrs., tables. 23 cm.

TOMASHPOL'SKIY, L.M.

Oil and gas in future fuel and power resources of the country. Neft.  
khoz. 39 no.10:13-17 0 '61. (MIRA 15:1)  
(Petroleum as fuel), (Gas as fuel)

BERG, P.D.; GOL'DSHTEYN, R.I.; ZEL'KIND, Ye.M.; TOMASHPOL'SKIY, L.M.;  
FEDOROV, I.V.: IVANOV, V.A.; CHEKULAYEVA, Yu.I.; KUROVA, E.A.,  
red.; NIKOLAYEVA, Ye.A., vchd. red.; MASOLOV, Ya.M., tekhn. red.

[Petroleum refining in capitalist countries; statistical studies]  
Neftepererabatyvaiushchaia promyshlennost' kapitalisticheskikh  
stran; statisticheskii sbornik. Moskva, Vol.1. [Petroleum  
refining and petroleum products] Pererabotka nefti i proizvodstvo  
nefteproduktov. 1960. 219 p. Vol.2. [Consumption, transportation,  
and storage of petroleum and petroleum products] Potreblenie,  
transport i khranenie nefti i nefteproduktov. 1961. 323 p.  
(MIRA 15:6)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy institut na-  
uchnoy i tekhnicheskoy informatsii.  
(Petroleum--Refining) (Petroleum industry--Statistics)

TOMASHPOL'SKIY, M.S.

Efficient drying of painted metal parts. Avt. prom. №.12:29-33 D. 158.  
(MIRA 11:12)

1. Moskovskiy avtovzavod imeni Likhacheva.  
(Metals--Finishing) (Drying apparatus)

AUTHOR:

Tomashevskiy, M.S.

SOV/113-58-12-10/17

TITLE:

The Rational Drying of Painted Metal Products (Ratsional'-  
naya sushka okrashennykh metallicheskikh izdeliy)

PERIODICAL:

Avtomobil'naya promyshlennost', 1958, Nr 12, pp 29-33  
(USSR)

ABSTRACT:

Painted metal parts in automobile plants are dried at a temperature of 100-110°C for 30-60 min. The increase of production and conveyor speeds necessitates a more efficient method of drying. Radiation drying heats the inner layer of the paint and facilitates the escape of the solvents. Drying takes place by oxidation and polymerization, which are increased by higher temperatures of 150-170°C. The greater quantity of heat supplied improves the quality of the paint coating. The intensity of the radiation depends on the temperature (Figure 1). The maximal intensity moves from the infrared wavelengths to the field of light waves, if the temperature is considerably increased. At the present time, "dark" radiators are used which are heated to 300-400°C by electric current or gas. In these radiators, the heating elements are open nickel-chromium spirals (Figure 3). They may also be cast into an iron plate (Figure 4). To reduce the considerable consumption of elec-

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The Rational Drying of Painted Metal Products

SOV/113-53-12-10/17

tric energy, a corrugated steel panel, which is heated by smoke gases to 300-400°C may be used. The influence of the radiation intensity on the heating time is shown in Figure 5. A drying chamber has been designed by the author using the mentioned principles (Figure 6). The efficiency factor may be further increased by circulating the heated air several times. There are 4 graphs and 3 diagrams.

ASSOCIATION: Moskovskiy avtozavod imeni Likhacheva (Moscow Automobile Plant imeni Likhachev)

Card 2/2

TOMASHPOL'SKIY, P. [Tomashpol's'kyi, P.], inzh.

Hothouse with a 5000 square meter area. Sil'. bud. 13 no. 5:7-8 My  
'63. (MIRA 17:3)

TOMASHPOL'SKIY, Yu.Ya.; VENEVTSOV, Yu.N.; ZHDANOV, G.S.

Interrelation of specific dielectric and magnetic properties  
in "ferromagnetics." Zhur. eksp. i teor. fiz. 46 no.5:1921-  
1923 My '64. (MIRA 17:6)

1. Fiziko- chimicheskiy institut imeni Karpova.

ACCESSION NR: AP4037617

S/0056/64/046/005/1921/1923

AUTHORS: Tomashevskiy, Yu. Ya.; Venevtsev, Yu. N.; Zhdanov, G. S.

TITLE: Concerning the connection between special dielectric and magnetic properties in "ferroelectric magnets"

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 5, 1964, 1921-1923

TOPIC TAGS: ferroelectricity, ferromagnetism, dipole moment, dielectric constant, specific magnetization, antiferromagnetism, atomic structure, electric structure, magnetic structure

ABSTRACT: To check on the presence of an internal connection between the electric and magnetic dipole structures of  $\text{BiFeO}_3$ , which is a new class of substance combining special dielectric and special magnetic properties ("ferroelectric magnets"). Comprehensive investigations were made of the temperature dependences of the unit-cell para-

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ACCESSION NR: AP4037617

meters, the dielectric constant, and the specific magnetization, with special care in the region of the antiferromagnetic transition. The details of the experiment are described. The noticeable anomalies in the curves of these parameters in the region of the Neel point offer evidence of the existence of a connection between the magnetic, electric, and atomic structures. It is precisely by virtue of this connection that the sharp change in the magnetic structure at the point of antiferromagnetic transition leads to noticeable changes in the electric and atomic structures, as reflected in the anomalies of the corresponding parameters near the Neel point. The observation of one of the manifestations of such an interaction in  $\text{BiFeO}_3$  indicates that this connection is experimentally detectable and can be observed and investigated in a comprehensive fashion, by studying the changes in the magnetic and electric characteristics and of the parameters of the atomic lattice as functions of several extraneous factors (temperature, pressure, fields, etc.). The connection can be regarded both on a unit-cell scale, as well as on a scale

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ACCESSION NR: AP4037617

of multidomain formations in the case of single crystals or poly-crystals. Orig. art. has: 1 figure.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physico-chemical Institute)

SUBMITTED: 04Mar64

DATE ACQ: 09Jun64

ENCL: 01

SUB CODE: SS

NR REF Sov: 011

OTHER: 000

Card 3/4

ACCESSION NR: AP4042183

S/0190/64/006/007/1181/1186

AUTHOR: Tomashpol'skiy, Yu. Ya.; Markova, G. S.

TITLE: Possibility of applying the method of electrical recording of the intensity of scattered electrons to the study of amorphous polymers

SOURCE: Vy\*skomolekulyarnye soyedineniya, v. 6, no. 7, 1964,  
1181-1186

TOPIC TAGS: amorphous polymer, amorphous polymer structure, electrical recording, scattered electron intensity, electron diffraction pattern, poly(ethylene terephthalate), atactic polystyrene, isotactic polystyrene

ABSTRACT: The possibility of applying the method of electrical recording of the intensity of scattered electrons (G. O. Bagdy\*kyants', A. G. Alekseyev, Izv. AN SSSR, ser. fiz., 23, 773, 1959) to the study of the structure of amorphous polymers has been investigated on thin films of poly(ethylene terephthalate) and of atactic and isotactic polystyrene. The procedure and equipment are described. The results

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ACCESSION NR: AP4042183

of the study are given in the form of electron diffraction patterns. These results in general, and in particular the results of the study of the effect of fast electrons on the structure of poly(ethylene terephthalate) films in various initial states, indicate that the method of electrical recording of the intensity of scattered electrons can be applied to the study of the structure of amorphous polymers. It is assumed that it can also be used for the study of a great variety of amorphous substances and glasses, for the observation of certain continuous processes (melting of crystal phases, crystallization, irradiation with fast electrons) involving structural changes in the substances studied, and for exact and rapid measurement of the intensity of individual reflex effects. Orig. art. has: 6 figures.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova. (Physico-chemical Institute)

SUBMITTED: 02Mar63 ATD PRESS: 3054 ENCL: 00  
SUB CODE: OC, GC NO REF SOV: 003 OTHER: 005

Card 2/2

ACC NR: A16032959

SOURCE CODE: UR/0070/66/011/005/0731/0735

AUTHOR: Tomashpol'skiy, Yu. Ya.; Veneytsev, Yu. N.

ORG: Physicochemical Institute im. I. Ya. Karpov (Fiziko-khimicheskiy institut)

TITLE: X-ray diffraction, and electric and magnetic investigations of a system comprising a ferroelectric and a ferromagnet

SOURCE: Kristallografiya, v. 11, no. 5, 1966, 731-735

TOPIC TAGS: x ray diffraction, solid solution, ferroelectric material, ferromagnetic material, electric property, magnetic property, temperature dependence

ABSTRACT: The purpose of the investigation was to check on the feasibility of synthesizing compounds which exhibit simultaneously ferroelectric and ferromagnetic properties, which was demonstrated by the authors in earlier investigations (FTT v. 7, no. 10, 3126, 1965). Tests were made on the polycrystalline systems  $\text{BaTiO}_3$  -  $\text{Sr}_{0.3}\text{La}_{0.7}\text{MnO}_3$  (I) and  $\text{K}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$  -  $\text{Sr}_{0.3}\text{La}_{0.1}\text{MnO}_3$  (II) obtained by sintering the corresponding oxides. The properties and structure of the samples were determined by x-ray analysis. The dielectric constant was measured with a bridge circuit in a weak field at 200 kcs, and the magnetic measurements were made by a procedure described elsewhere (Kristallografiya v. 8, no. 4, 1963). The conductivity was measured with a bridge. Plots are presented of the concentration dependence of the unit-cell dimensions on the logarithm of the conductivity, the temperature dependence of the dielectric constant, and the temperature dependence of the spontaneous magnetic moment.

UDC: 537.226

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ACC NR: AP6032959

Phase diagrams of the two systems are presented. The results show that the compounds remain ferromagnetic in almost the entire range of concentrations, and that compounds I and II have ferroelectric properties at 87 - 95 and 90 - 97 mol.% respectively. Although the ferroelectricity and the ferromagnetism combine only at low temperatures, it is assumed that the temperature range can be extended by suitably choosing the initial components. The authors thank V. P. Glushkov and A. I. Abramov for chemical analysis. Orig. art. has: 5 figures.

SUB CODE: 20/ SUBM DATE: 12May65/ ORIG REF: 005/ OTH REF: 002

Card 2/2

L 1984-66 EK(s)-2/E:T(1)/ENT(m)/EPF(n)-2/EWA(d)/T/EWP(t)/EWP(z)/EWP(b)/EWA(c)

LIP(c) JD/JG/GG

ACCESSION NR: AP5021093

UR/0056/65/049/002/0367/0372

AUTHOR: Tomaspol'skiy, Yu. Ya.; Venevtsev, Yu. N.; Antonov, G. N.

TITLE: Ferroelectric-magnetic materials in the system PbFe<sub>2/3</sub>W<sub>1/3</sub>O<sub>3</sub>--Pb<sub>2</sub>YbNbO<sub>6</sub>

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 2, 1965,  
376-372

TOPIC TAGS: ferroelectric material, antiferromagnetic material, lead containing alloy, iron containing alloy, tungsten containing alloy, niobium containing alloy, solid solution

ABSTRACT: New ferroelectric-magnetic materials with perovskite structure were prepared in polycrystalline form by firing the oxides WO<sub>3</sub>, Fe<sub>2</sub>O<sub>3</sub>, Nb<sub>2</sub>O<sub>5</sub>, and Yb<sub>2</sub>O<sub>3</sub> and the carbonate PbCO<sub>3</sub> at 700--1000°C for 1--7 hours. The techniques used for the crystal-structure measurements at high temperatures and for the phase measurements were described by the authors earlier (FTT v. 6, 2998, 1964 and Zav. lab. no. 9, 1112, 1961). The dielectric measurements were made by a standard bridge method, and the magnetic measurements by the Faraday method. The tests showed that several solid solutions are formed in the PbFe<sub>2/3</sub>W<sub>1/3</sub>O<sub>3</sub>--Pb<sub>2</sub>YbNbO<sub>6</sub> system, some of which combine ferroelectric or antiferroelectric properties with ferrimagnetic ones over a relatively wide range of concentrations and temperatures. Some results were ob-

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ACCESSION NR: AP5021093

tained, which indicated a coupling between the electric and magnetic dipole structures in the investigated compositions. The results may be of use in microwave technology. "The authors thank G. S. Zhdanov for discussing the results and B. A. Strukov for help." Orig. art. has: 6 figures.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physicochemical Institute)

SUBMITTED: 30 Jan 65

ENCL: 00

SUB CODE: SS, MM

NR REF Sov: 010

OTHER: 001

Card 2/2 DP

TOMASHPOL'SKIY, Yu.Ya.; VENEVITSEV, Yu.N.

New lead-containing perovskites. Fiz. tver. tela 7 no.2:517-520  
F '65. (PERA 18:6)

1. Nauchno-issledovatel'skiy fiziko-khimicheskiy institut imeni  
Karpova, Moskva.

"APPROVED FOR RELEASE: 04/03/2001

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REF ID: A6513

04/03/2001

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001756210011-7"

ACCESSION NR: AP5000287

S/0070/64/009/006/0890/0032

material. The electron microscope investigation of the crystallographic

75-kv accelerating voltage of the microscope made it possible to ob-

ing of infinite chains of alternating FeO<sub>4</sub> and BiO<sub>3</sub> pyramids, as

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CIA-RDP86-00513R001756210011-7"

L 22121-66 EWT(l)/EWT(m)/EWP(w)/EPF(n)-2/T/EWP(t) IJP(c) JD/JG/GG

ACC NR: AP6004921

SOURCE CODE: UR/0056/66/050/001/0069/0075

AUTHOR: Roginskaya, Yu. Ye.; Tomashpol'skiy, Yu. Ya.; Venevtsev, Yu. N.; Petrov, V. M.; Zhdanov, G. S.

ORG: Physicochemical Institute im. L. Ya. Karpov (Fiziko-khimicheskiy institut)

TITLE: On the character of dielectric and magnetic properties of  $\text{BiFeO}_3$ .

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. v. 50, no. 1, 1966, 69-75

TOPIC TAGS: bismuth compound, ferroelectric material, dielectric property, solid solution, Curie point, Neel temperature, magnetic property

ABSTRACT: This is a continuation of earlier work by the authors on  $\text{BiFeO}_3$  (ZhETF v. 46, 1921, 1964). In view of the contradictory reports on the properties of  $\text{BiFeO}_3$ , especially with respect to its ferroelectric properties, the authors analyze the published data and in addition carried out a more detailed investigation of the dielectric properties and the structure of  $\text{BiFeO}_3$  in a broad range of temperatures, as well as of solid solutions of this substance with  $\text{PbFe}_{1/2}\text{Nb}_{1/2}\text{O}_3$ . Particular attention is paid to the 400--500°C region, and to the solid solution. The polycrystalline samples for the investigation were prepared by the usual ceramic techniques. The dielectric constant and the loss angle were measured at

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ACC NR: AP6004921

300 Mcs by the coaxial-line method. Other specific properties of BiFeO<sub>3</sub> in addition to the large internal fields and large spontaneous polarization, were a high Curie temperature (850C), and the absence of nonlinear properties at room temperature. An analysis of all the published data and the present results shows that in spite of the fact that the spontaneous electric polarization of BiFeO<sub>3</sub> is very high, so that no dielectric hysteresis loops could be obtained, this substance is ferroelectric. Various reasons for this conclusion are discussed. An analysis of the magnetic properties below the Neel temperature (370C) also shows that BiFeO<sub>3</sub> has compensated ferromagnetism in addition to ferroelectricity. Orig. art. has: 5 figures.

SUB CODE: 20,07 / SUBM DATE: 17Aug65 / ORIG REF: 022 / OTH REF: 002

Card 2/2 BK

that were not strictly of one phase, and no determination was made  
as to the nature of the material of the perovskite cells, whose para-

L 11986-6

ACCESSION NR: AP4046610

their basis, for the purpose of understanding the nature of the properties of compounds of this type, which have antiferroelectric properties. These materials are materials which combine anti-

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L 11986-65

ACCESSION NR: AF4040010

the system  $\text{PbCo}_3$ - $\text{W}_2\text{O}_8$ - $\text{Fe}_2\text{O}_3$  was investigated and found to have

Satisfied with room  
and service.

## ASSOCIATION

10. *Pyroclastic flow* - *Pyroclastic flow* is a very hot, turbulent mixture of ash, pumice, and volcanic gases that moves rapidly down the flanks of a volcano.

EIN UND DREI

SUB CODE: 18, 18 NF REF ID: 108 OTHER: 002

Cord 3/3

TOMASHPOL'SKIY, Yu.Ya.; VENEVTSOV, Yu.N.; ZHDANOV, G.S.

Electron diffraction study of the crystalline structure of  
BiFeO<sub>3</sub>. Dokl. AN SSSR 153 no.6:1313-1314 D '63.  
(MIRA 17:1)  
I. Fiziko-khimicheskiy institut im. L.Ya. Karpova. Pred-  
stavлено akademikom N.V. Belovym.

TOMASHPOL'SKIY, Yu.Ya.; MARKOVA, G.S.

Electron diffraction study of the crystalline structure of polyethylene terephthalate with the use of Fourier synthesis. Vysokom.sosed. 6 no.2: 274-280 F '64. (MIRA 17:2)

1. Fiziko-khimicheskiy institut imeni Karpova.

S/755/61/000/003/024/027

AUTHORS: Beskorovannyy, N. M., Yeremeyev, V. A., Tomashpol'skiy, Yu. Ya.

TITLE: The diffusion mobility of lithium in iron and steels.

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Metallurgiya i metallovedeniye chistykh metallov. no.3. 1961, 233-248.

TEXT: The paper describes an experimental determination of the diffusion processes of the corrosionally highly aggressive Li in structural materials. The less-than-1-sec half-life of radioactive Li<sup>8</sup> and Li<sup>9</sup> discouraged their use; hence, the flame-photometry method outlined by N. S. Poluektov (In Metody analiza po fotometrii plameni - Methods of flame-photometric analysis. Moscow, Goskhimizdat, 1959). This method constitutes a non-photographic spectral method in which a photocell and a galvanometer are used to record the radiation of the specimen. The readily excited Li line 6708 Å with an excitation potential of 1.9 ev was found convenient for the present study. A straight-line variation of radiation intensity versus Li concentration was found for concentrations up to  $5 \cdot 10^{-4}$  wt. %. A schematic view of the equipment setup for the determination of the Li in the flame is shown and explained, including the aerosol generator, a large-particle and droplet catcher, a mixer, and an acetylene-air burner, a monochromator (6708 Å), a

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The diffusion mobility of lithium in iron and steels. S/755/61/000/003/024/027

photoelectronic multiplier, and a range-shunt-equipped light-beam galvanometer with a sensitivity of  $10^{-8}$ - $10^{-9}$  a/min. The test specimens were cylinders 12-16-mm diam, 30-35 mm high. Annealed specimens were placed in technical-Fe beakers which were filled with Li in a vacuum equipment and placed in stainless-steel containers which were sealed in an arc furnace in an Ar atmosphere and held at T = 600, 800, and 1,000°C. After diffusion soaking the Li was leached out with water. A 0.05-0.1-mm layer was taken off the cylindrical surface (after removal of a possibly Li-contaminated face layer of sufficient thickness), dissolved in a  $\text{HNO}_3$ -HCl mixture, and analyzed. At any one T a maximum Li content occurs not at the surface, but at some depth (of the order of 1 mm), at a value and at a depth which increase with C content in the steel. Intense surface-grain disintegration is observed (photos). The diffusion mobility of Li in steels is found to be appreciable, comparable with that of C. It is greater in  $\alpha$ -Fe than in  $\gamma$ -Fe. The presence of C deepens the penetration of the Li. Li corrosion reduces the microhardness of technical Fe and of the ferrite in C steels, possibly in part by microscopic-pore formation. Such structural changes occur only in regions in which the Li diffusion is substantial. The Li penetration proceeds preferably along the grain boundaries which are ordinarily enriched with impurities such as C, S, etc. Thus it is confirmed, as was stated by the senior author et al. (in no.2 of the present sbornik, Atomizdat, 1960) that S inclusions serve as focal points of corrosion. The even

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The diffusion mobility of lithium in iron and steels.

S/755/61/000/003/024/027

more consequential modifications in the austenitic and perlitic structure as a result of the Li-produced C leaching are pictured and interpreted. In round figures, the corrosion-affected Li-saturated structure has one-half the depth of the deepest Li penetration. C steels soaked in liquid Li undergo significant volumetric increases; their density decreases with increasing C content in the steel. This must be attributed to the formation of low-density phases, such as  $\text{Li}_2\text{C}_2$  et al. The high-T formation of low-density phases is accompanied by significant plastic deformations, whereupon cooling results in crack-formation (photo). In addition to the change in microhardness, the strength and the plasticity of C steels are impaired by Li penetration, especially in high-C steels and at high T. Thus, e.g., steels 45 and 70 acquire the properties of low-grade pig iron at T 800-1,000°C, an embrittlement that must be attributed to intense microporosity formation. There are 18 figures, 3 tables, and 6 references (4 Russian-language Soviet, 1 presumably Russian-language Chinese, and 1 English-language). The participation of E. A. Korepanov, L. M. Ozerov, and M. V. Teregulov in the work is acknowledged.

ASSOCIATION: MIFI (Moscow Engineering Physics Institute).

Card 3/3

TOMASHPOL'SKIY, Yu.Ya.; MARKOVA, G.S.

Possibility of studying amorphous polymers by the method of  
the electrical recording of the intensity of scattered elec-  
trons. Vysokom. soed. 6 no.7:1181-1186 Jl. '64 (MIRA 18:2)

1. Fiziko-khimicheskiy institut imeni Karpova.

TOMASHPOLICKIY, Yu.Ya.; VENIVTSOV, Yu.N.; BEZNOZDRov, V.N.

Ferrimagnetism in ferroelectric - ferromagnetic systems. Fiz. tver. tala 7 no.9:2763-2767 S '65. (MIRA 18:10)

I. Nauchno-issledovatel'skiy fiziko-khimicheskiy institut imeni L.Ya. Karpova, Moskva.

L 7763-66 EWI(1)/EWI(m)/EWP(t)/ENF(b) IJP(c) JD/UG  
ACC NR: AP5025403 SOURCE CODE: UR/0181/65/007/010/3126/3178

44 55 44 55  
AUTHOR: Torashpol'skiy, Yu. Ya.; Venevtsev, Yu. N.

44 55  
ORG: Physicochemical Scientific Research Institute im. L. Ya. Karpov, Moscow  
(Nauchno-issledovatel'skiy fiziko-khimicheskiy institut)

TITLE: Ferromagnetism in the  $Pb_2CoW_6$ - $BaTiO_3$  system

SOURCE: Fizika tverdogo tela, v. 7, no. 10, 1965, 3126-3128

TOPIC TAGS: lead compound, cobalt compound, tungstate, barium titanate, solid solution, phase transition, phase diagram, ferromagnetism, polycrystal

ABSTRACT: The authors study polycrystalline specimens in the  $Pb_2CoW_6$ - $BaTiO_3$  system produced by sintering oxides and carbonates. Cr radiation was used for the x-ray analysis. The dielectric constant was studied as a function of temperature at 200 kc in a weak field with an accuracy of 5-10%. The magnetic susceptibility and spontaneous magnetic moment were measured. X-ray analysis shows only the cubic modification of the perovskite cell for 5-95%  $BaTiO_3$  concentrations. Superstructure lines due to ordering on the  $Pb_2CoW_6$  side are observed on the x-ray photographs to approximately 25 mol. %  $BaTiO_3$ , although partial ordering is apparently maintained to even higher concentrations (~40 mol. %  $BaTiO_3$ ). Curves for the dielectric constant as a function of temperature show maxima which are characteristic for ferro- or antiferroelectrics at compositions close to the initial compounds. These maxima move toward the low

Card 1/2

L 7763-66

ACC NR: AP5025403

temperature side starting with small concentrations of BaTiO<sub>3</sub> in Pb<sub>2</sub>CoWO<sub>6</sub> and vice versa. No extrema were observed on  $\epsilon(T)$  curves for compositions of 20-80 mol.% BaTiO<sub>3</sub>. This is apparently due to a shift in the point for ferro- or antiferroelectric transitions toward the low temperature side. Specimens with 5 mol.% BaTiO<sub>3</sub> were used for the magnetic measurements. The curve for magnetic susceptibility as a function of temperature has a shape which is typical of ferrimagnetic materials with a poorly defined inflection at about -70°C. The phase diagram of the system shows that the antiferroelectric Curie point for Pb<sub>2</sub>CoWO<sub>6</sub> and the ferroelectric Curie point for BaTiO<sub>3</sub> fall sharply in the low temperature region and lie in the temperature range below -(160-180°C) at concentrations of 15 and 85 mol.% BaTiO<sub>3</sub>. Ferromagnetic solid solutions were observed in a certain region on the Pb<sub>2</sub>CoWO<sub>6</sub> side with a combination of antiferroelectric and ferrimagnetic properties due to partial ordering of Co ions. An anomaly was observed in the curve for  $\epsilon(T)$  near the ferrimagnetic phase transition. This phenomenon may be due to the interrelationship between electric and magnetic dipoles. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 11May65/ ORIG REF: 007/ OTH REF: 000

Card 2/2

TOMASHPOL'SKIY, Yu.Ya.; VENEVTSOV, Yu.N.; ZHDANOV, G.S.

Microelectron diffraction study of the crystalline structure of  
the ferromagnetic Bi Fe O<sub>3</sub>. Kristallografiia 9 no.6:846-852  
N-D '64. (MIRA 18:2)

1. Fiziko khimicheskiy institut imeni Karpova.

TOMASHPOL'SKIY, Yu.Ya.; VENEVTSIEV, Yu.N.

X-ray diffraction and electric investigations of the system  
PbCo<sub>1/2</sub>O<sub>3</sub>-PbYb<sub>1/2</sub>Nb<sub>1/2</sub>O<sub>3</sub>. Fiz. tver. tela 6 no.10  
2998-3003 0'64. (MR: 17.52)

1. Nauchno-issledovatel'skiy fiziko-khimicheskiy institut im.  
L.Ya. Karpova, Moskva.

VEREVTSOV, Yu.N.; ROGINSKAYA, Yu.Ye.; VISKOV, A.S.; IVANOVA, V.V.;  
TOMASHPOL'SKIY, Yu.Ya.; SHVORNEVA, L.I.; KAPYSHEV, A.G.;  
TEVEROVSKIY, A. Yu.; ZHDANOV, G.S.

New lead-containing porovskite compounds of complex composition. Dokl. AN SSSR 158 no.1636-88 S-0 '64 (MIRA 17:8)

I. Fiziko-khimicheskiy institut imeni L. Ya. Karpova. Predstavлено академиком N.V. Belovym.

L 10759-66 EWT(1) IJP(c) GG  
ACC NR: AP5022720 SOURCE CODE: UR/0181/65/007/009/2763/2767  
AUTHOR: Tomashpol'skiy, Yu. Ya.; Venevtsev, Yu. N.; Beznozdrev, V. N.  
ORG: Physicochemical Scientific Research Institute im. L. Ya. Kartsov, Moscow  
(Nauchno-issledovatel'skiy fiziko-khimicheskiy institut) 99  
TITLE: Ferromagnetism in ferromagnetic-ferroelectric systems B  
SOURCE: Fizika tverdogo tela, v. 7, no. 9, 1965, 2763-2767  
TOPIC TAGS: ferroelectric material, ferromagnetic material, ferromagnetism, alloy phase diagram, solid solution, phase transition  
ABSTRACT: The PbTiO<sub>3</sub>-Sr<sub>0.3</sub>La<sub>0.2</sub>MnO<sub>3</sub> system is used as a basis for studying the feasibility of producing ferromagnetics in the form of solid solutions in a ferroelectric-ferromagnetic system. The specimens were prepared by sintering MnO<sub>2</sub>, TiO<sub>2</sub>, PbCO<sub>3</sub> and SrCO<sub>3</sub> at 850-1350°C for 1-3.5 hours. X-ray diffraction patterns were taken and the dielectric constant, magnetic susceptibility, spontaneous magnetic moment and conductivity were measured. X-ray analysis at room temperature shows that this system forms a continuous series of solid solutions of the perovskite type. Phase transitions occur at 30 and 70% PbTiO<sub>3</sub>. The experimental data indicate that the solid solutions from 70 to 100 mol % PbTiO<sub>3</sub> may have ferroelectric properties in a definite temperature range. Curves for the dielectric constant as a function of temperature 44

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L 10759-66

ACC NR: AP5022720

(4)

in this system show maxima which indicate phase transitions from the paraelectric to the ferroelectric state. Curves for inverse magnetic susceptibility and spontaneous magnetic moment as functions of temperature show that the point of the magnetic phase transition decreases with an increase in the lead titanate concentration. Extrapolation shows that the transition point lies close to absolute zero at 95 mol % PbTiO<sub>3</sub>. The phase diagram for the system shows that the ferroelectric transition point falls more rapidly than that for magnetic phase transition. Thus the system keeps its ferromagnetic properties in the 0-92 mol % range, while ferroelectric properties occur in compositions with 70-100 mol % PbTiO<sub>3</sub>. The system displays both ferroelectric and ferromagnetic properties in the interval between 70 and 92% lead titanate at lower-than-room temperatures. The method proposed in this paper may be used for producing materials with various combinations of ferro- and antiferroelectric with ferro-, ferri- and antiferromagnetic properties. The authors thank V. P. Glushkova and A. M. Abramova for making the chemical analyses. Orig. art. has: 5 figures.

SUB CODE: 20,11/ SUBM DATE: 09Apr65/ ORIG REF: 002/ OTH REF: 004

H.W.  
Card 2/2

TOMASHPOL'SKIY, Yu.Ya.; VENEVTSEV, Yu.N.

Ferromagnetism in the system  $Pb_2CoW_6$  —  $BaTiO_3$ . Fiz. tver.  
tela 7 no.10:3126-3128 O '65. (MIRA 18:11)

1. Nauchno-issledovatel'skiy fiziko-khimicheskiy institut imeni  
Karpova, Moskva.

TOMASHUK, F.A.

VINOKUROVA, M.D., rabotnik pavil'ona,; GALKINA, A.G., rabotnik pavil'ona,;  
GITIS, Ya.Ye., rabotnik pavil'ona,; DERGACHEVA, V.I., rabotnik pavil'ona;  
ZAK, R.G., rabotnik pavil'ona,; RAKSHA, N.A., rabotnik pavil'ona,;  
SALAY, Ye.A., rabotnik pavil'ona,; TARAKANOV, G.N., rabotnik pavil'ona,;  
TOMASHUK, F.A., otv. red.; DMITRIYEVA, L.A., red.; IUKINA, L.Ye..  
tekhn. red.

[Far East] Dal'nii Vostok. Moskva, Izd-vo "Sovetskaja Rossiya,"  
1958. 109 p. (MIRA 11:12)  
(Soviet Far East--Agriculture)

SAKHAROVA, N., ALEKSANOVA, R., TOMASHUK, Irina

Laundry

Organizing a mechanical laundry at home. Rabotnitsa no. 3, March 1952.

MONTHLY LIST OF RUSSIAN ACCESSIONS. LIBRARY OF CONGRESS. AUGUST 1952. UNCLASSIFIED.

SOURCE: Ref. zh. Khimiya, Abs. 11S3(5)

AUTHOR: Peshekhonova, A. L., Kamenskty, I. V., Korshak, V. V., Tomashuk, L. A.

B

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APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001756210011-7"

TOMASHUNA S, B. Ya.

PHASE I BOOK EXPLOITATION

SOV/5463

Sovetskaya antarkticheskaya ekspeditsiya

Vtoraya morskaya ekspeditsiya na d/e "Ob'", 1956-1957 gg.; obshcheye opisaniye i nauchnyye rezul'taty (Second Marine Expedition on the Diesel-Electric Ship "Ob'", 1956-57; General Description and Scientific Results) Leningrad, Morskoy transport, 1959. 175 p. (Series: Its: [Materialy] no. 5) Errata slip inserted. 1,200 copies printed.

Sponsoring Agency: Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut.

Ed. (Title page): I. V. Maksimov, Doctor of Geographical Sciences, Professor;  
Ed.: L. G. Kaplinskaya; Tech. Ed.: O. I. Kotlyakova.

PURPOSE: This book is intended for oceanographers, meteorologists, and hydrochemists.

Card 1/6

Second Marine Expedition (Cont.)

SOV/5463

**COVERAGE:** The present volume, the fifth in a series of seven, is a collection of articles (except for two) devoted specifically to the oceanographic, meteorological, and hydrochemical findings of the Second Soviet Marine Expedition conducted on the diesel ship "Ob'" (I. A. Man, Captain) during 1956-57. The first two articles outline the Expedition's organization and program, and provide a general account of its activities during the 223-day voyage, which covered more than 40,000 miles of the Atlantic, Antarctic, and Indian Oceans. The expedition was sponsored by the Arctic and Antarctic Scientific Research Institute of the Glavsevmorput' Ministerstva morskogo flota SSSR (Main Administration of the Northern Sea Route of the Ministry of the Merchant Marine of the USSR) as part of the International Geophysical Year program. Its purpose was to investigate 1) atmospheric processes in the Antarctic region and their effect on the earth's general circulation, 2) basic regularities in the distribution of waters in the southern oceanic zone, 3) exchange of the waters of the southern seas with the waters of the world ocean, 4) geological structure of the sea bottom in the Antarctic region, and 5) the plankton, benthos.

Card 2/6

Second Marine Expedition (Cont.)

SOV/5463

ichthyofauna, and microorganisms of the Antarctic waters. Observations of the magnetic field of the earth were also made. The expedition, headed by Professor Igor' Vladislavovich Maksimov, Doctor of Geographical Sciences and Professor at the Leningradskoye vyssheye inzhenernoye morskoye uchilishche imeni S.O. Makarova (Leningrad Higher Marine Engineering School imeni S.O. Makarov), consisted of the following 8 scientific task forces: aerometeorological (headed by Leonid Gennadiyevich Sobolev); hydrological (Kirill Vladimirovich Moroshkin); geological (Aleksandr Petrovich Lisitsyn); hydrochemical (Aleksey Nikolayevich Bogoyavlenskiy); hydrobiological (Viktor Aleksandrovich Arsen'yev); geophysical (Nikolay Panteleymonovich Grushinskiy); geographic (Gravrila Dmitriyevich Rikhter); and hydrographic (Yuriy Aleksandrovich Gordeyev). A complete list of the names and affiliations of the 65 scientific and administrative members of the Expedition is contained in the first article. The articles were written by members of the Institut okeanologii Akademii nauk SSSR (Institute of Oceanology, Academy of Science- USSR), Gosudarstvennyy okeanograficheskiy institut Gidrometsluzhby SSSR (State Oceanographic Institute of the Hydro-

Card 3/6

Second Marine Expedition (Cont.)

SOV/5463

meteorological Service of the USSR), Vsesoyuznyy nauchno-issledovatel'skiy institut rybnogo khozyaystva i okeanografii (All-Union Scientific Research Institute of Fisheries and Oceanography), and the Arctic and Antarctic Scientific Research Institute. There are no references.

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Card 5/6

Second Marine Expedition (Cont.)

SOV/5463

Kutyrin, V. M. Determining the Content of Chlorophyll in Sea  
Water and the Spectral Analysis of Phytoplankton Pigments

173

AVAILABLE: Library of Congress (G860. S58)

JA/dwm/bc  
11-1-61

Card 6/6

STERLIN, B.P.; TOMASHUNAS, E.V.; AGISHEV, A.P.; FEDOROV, Ye.I.

Creation of underground natural gas reservoirs in the Donets,  
Dnieper, and Black Sea Economic Regions. Gaz. delo no.8:22-25  
'64. (MIRA 17:9)

1. Ukrainskiy filial Vsesoyuznogo nauchno-issledovatel'skogo  
instituta prirodnogo gaza.

TOMASHUNAS, Z. B. and IVANOV, Yu. G. (reader)

"The Khankayskiy Ore Region in Southern Primor'ye"

report presented at the First All-Union Conference on the Geology and Metallurgy  
of the Pacific Ocean Ore Belt, Vladivostok, 2 October 1960

So: Geologiya Rudnykh Mestorozhdeniy, No. 1, 1961, pages 119-127

## FORMATTING THE CLOUD COMPUTING

Rumania/Chemical Technology. Chemical Products and Their Application -- Food industry, I-28

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6594

Author: Tomasian, Edmond

Institution: None

Title: Effect of Copper on the Vitamin C Content of Tomato Paste

Original  
Publication: Rev. ind. aliment. prod. vegetale, 1955, No 8, 23-25

**Abstract:** Investigation of changes in the vitamin C content of tomato paste during the different stages of its production in stainless steel and copper equipment. The losses are of 14.86% in the former case, and of 44.54% in the latter. In the paste stored for one year in tinplated cans the decrease of vitamin C content was almost not dependent on the material of the equipment.

Card 1/1

TOMASIC,Milan

Analysis of conservative therapy of tuberculosis with special reference to the elimination of bacilli from sputum. Tuberkuloza, Beogr. 11 no.4:499-506 O-D '59.

1. Tuberkulosni odjel Opce bolnice, Bjelovar (sef: dr M. Tomasic).  
(ANTITUBERCULAR AGENTS ther.)  
(SPUTUM microbiol.)

TOMASIC, P.; GRAU, A.

Phage typing with special reference to the epidemic of typhoid  
in Osijek and its environment. Higijena 12 no.1:26-34 '60.  
(TYPHOID epidemiol)

TOMASIC, Pavao, dr.; MIKIC, Fedor, dr.; ZIVKOVIC, Roko, dr.

Resistance of leptospiral titers. Lijecn. vjesn. 83 no.2:137-142  
'61.

1. Iz Centralnog higijenskog zavoda u Zagrebu i Internog odjela Opće  
bolnice u Pakracu.  
(LEPTOSPIROSIS diag)

TOMASIC, Pavle, Dr.

Problem of the etiology of endemic nephropathy. Lijec vjes 82 no.  
9/10:701-708 '60.

1. Iz Centralnog bigijenskog zavoda u Zagrebu  
(LEPTOSPIROSIS epidemiol)  
(KIDNEY DISEASES epiol)

TOMASIC, Pavle, dr.

Studies on human immunity to leptospirosis in Croatia. Lijecn.  
vješn. 86 no.4:419-425 Ap '64

1. Iz Republickog Zavoda za zastitu zdravlja u Zagrebu.

TOMASIC, P.; MRAVUNAC, B.

New theories in regard to pertussis. Lijec.vjes. 72 no.2:  
65-68 F '50. (CIML 19:2)

1. Of the Hygienic Institute in Zagreb (Director -- J.Brodarec,  
M.D.) and of the Infectious Diseases Hospital in Zagreb (Head --  
Prof. F.Mihaljevic).

TOMASIC, Pavao; BAJZER, Marko

Phage typing of *Salmonella typhosa* in Croatia. Higijena, Beogr.  
6 no.1:75-81 1954.

1. Centralni higijenski zavod, Zagreb.  
(*SALMONELLA TYPHOZA*  
phage typing)  
(*BACTERIOPHAGE*  
typing o *Salmonella typhosa*)

Thioamides. I. Thiofuroic acid amides. V. Hahn, Z. Stojanac, O. Scđdrov, N. Pravdić-đladović, S. Tomasic, and D. Emer (Univ. Zagreb, Yugoslavia). Croat. Chem. Acta 29, 319-27 (1957) (in German). A series of substituted amides of O:C(CSNRR):CH.CH:CH was prep'd. in general by portionwise addn. of 0.4-1 mole P<sub>2</sub>S<sub>5</sub> with shaking to a soln. of 1 mole of an appropriate C<sub>1</sub>H<sub>3</sub>OCONRR in 2-3 vols. C<sub>5</sub>H<sub>5</sub>N, refluxing the mixt. 40-120 min., cooling, pouring into 5-10 fold vol. H<sub>2</sub>O at 50-60°, keeping overnight in cold and working up as in methods (A) or (B): (A) the product was filtered off, washed, dried and crystd. directly, or dissolved in 8-10% NaOH, the soln. filtered, the product repptd. with 8-10% HCl, and crystd.; (B) if not crystallizable, the product was extd. with Et<sub>2</sub>O, the exts. washed with dil. HCl and H<sub>2</sub>O, dried, evapd., distd., and the distillate crystd. or redistd.

TOMASIC, S., dipl. inz.

Celebration of the tenth anniversary of the Research Institute for  
Processing Mineral Raw Materials in Freiberg, and scientific colloquium.  
Rud met zbor 3:107-109 '64.

TOMASIC, S.

Aldrin and dieldrin. p. 28.  
(HEMIZACIJA POLJOPRIVREDNE. JOURNAL OF FERTILIZERS AND CROP PROTECTION. No. 2,  
1956. Yugoslavia.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

TOMASIC, Stjepan, dipl. inz.

Supplying the Catici Washing Plant with magnetite. Ruder  
glasnik 2:47-54 '64.

1. Director, Department of Mineral Dressing of the Mining  
Institute, Belgrade.

LESIC, Dura, prof. dr inz.; TOMASIC, Stjepan, dipl. inz.; JOVANOVIC  
Gvozden, dipl. inz.

Agglomeration of fine coal by the Carboram process.  
Rudar glasnik 1 55-62 '64.

1. Mining and Geological Faculty of the University of Belgrade (for Lesic).
2. Mining Institute, Belgrade (for Tomasic and Jovanovic).

TO 111721 C, b.

YUGOSLAVIA/Organic Chemistry - Naturally Occuring Substances  
and Their Synthetic Analogs

E-3

- Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4569
- Author : Balenovic, K., Bregant, N., Gasport, B., Jambresic, I.,  
Tomasic, V.
- Title : Some Derivatives of L-Cysteine Aldehyde. An Improved  
Preparation of S-Benzyl-N-Phthaloyl-L-Cysteine. Amino  
Acids. XXXI.
- Orig Pub : Arhiv kemiju, 1955, 27, No 4, 207-210
- Abstract : A method has been worked out for the preparation of optically active S-benzyl-N-phthaloyl-L-cysteine (I), which has been converted into S-benzyl-N-phthaloyl-L-cysteinaldehyde (II); a number of derivatives of II have been prepared. Mixture of finely comminuted S-benzyl-L-cysteine (0.033 mole,  $[\alpha]_D +28^\circ$ ) and phthalic anhydride (0.035 mole) heated (bath temperature 130-135 $^\circ$ ) while stirring, for 30 minutes, dissolved in  $C_6H_6$  and from

Card 1/3

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YUGOSLAVIA/Organic Chemistry - Naturally Occuring Substances  
and Their Synthetic Analogs

E-3

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4563

BP 105-110°/0.01 mm,  $[\alpha]_D^{16} -54^\circ$  (c 1.07; 0.1 N HCl);  
picrate, MP 183-184° (from ethyl acetate ~ petrolicum  
ether). By reacting 0.08 mole II ( $[\alpha]_D^{16} -101^\circ$ ) in 50  
ml pyridine with 0.015 mole malonic acid (8 hours at  
45-50°), acidifying the solution with 10% solution of  
 $H_2SO_4$ , and extracting with ether was obtained racemic  
5-benzylthio-4-phthalimido-pentene-2-ic acid,  
yield 92%, after chromatography on  $Al_2O_3$  MP 141-142°  
(from  $CH_2Cl_2$ -petroleum ether).

Card 3/3

- 121 -

TOMASIC, V.

Determining the delivery date on our internal railroad transportation. p. 18.  
(Zeleznice, Vol. 13, No. 4, Apr. 1957, Beograd, Yugoslavia)

SO: Monthly List of East European Accessions (EEAL) Lc. Vol. 6, No. 8, Aug 1957. Uncl.

TOMASIC, V.

Application of Supplement 3 to the Decree on Rail Transportation. p. 10.  
(Zeleznice. Vol. 13, no. 1. Jan., 1957 Yugoslavia)

SO: Monthly List of East European Accessions (EEAL) LS, VOL. 6, no. 7, July 1957, Uncl.

TOMASIC, V.

Establishing the date of delivery in domestic railroad transportation.  
(To be contd.) p. 6.  
(Zeleznice, Vol. 13, no. 3, March 1957. Beograd, Yugoslavia.)

SO: Monthly List of East European Accessions. (EEAL) LC. Vol. 6, No. 7,  
July 1957. Uncl.

Diethyl ester of dichloracetamidomalonic acid. V. Tomić (Pliva Pharm. Co., Zagreb, Yugoslavia). Arhiv Kem. 24, 21-23 (1952) (English summary).—Aminomalonic acid ester-HCl (2.1 g.) and 1.43 g. dichloroacetyl chloride is dissolved in 30 cc. dry C<sub>6</sub>H<sub>6</sub>, and a soln. of 1.58 g. C<sub>6</sub>H<sub>5</sub>N in 10 cc. dry C<sub>6</sub>H<sub>6</sub> is added slowly with stirring and cooling, let stand overnight at room temp., filtered, washed with H<sub>2</sub>O and dried with Na<sub>2</sub>SO<sub>4</sub> and distilled to give 61% di-Et dichloracetamidomalonate, C<sub>8</sub>H<sub>10</sub>O<sub>4</sub>NCl<sub>2</sub>, m. 104-5°, sublimes at 119-121° under 0.002 mm. pressure. W. Jacobson

R. S.

TOMASIC, V.

Synthesis of 4-octene-2,7-dione from 1,8-bisdiazo-4-octene-2,7-dione. D. Fleš, V. Tomasic, and A. Markovac-  
Prpić ("Pliva," Zagreb, Yugoslavia). *Crodi. Chem. Acta*  
30, 69-72 (1965) (in English). —A soin. of 3.5 g. ( $N_2CHCO-$   
 $CH_2CH_2)_n$  (I) in 60 ml.  $\text{Et}_2\text{O}$  was treated in cold with 30  
ml. 10% HCl, the aq. layer sepd., extd. twice with each  
10 ml.  $\text{Et}_2\text{O}$ , the exts. washed with satd.  $\text{NaHCO}_3$  soin.,  
dried, and evapd. *in vacuo* to give 3.7 g. ( $\text{CICH}_2\text{COCH}_2\text{CH}_2)_n$   
(II), m. 65-7° ( $\text{EtOH}$ ). 1 (2 g.) in 100 ml.  $\text{Et}_2\text{O}$  was satd.  
with dry HCl in cold, the soin. neutralized with  $\text{Na}_2\text{CO}_3$ ,  
the  $\text{Et}_2\text{O}$  layer sepd., dried, evapd. *in vacuo*, the residue  
crystd. from 7 ml.  $\text{EtOH}$ , the cryst. product dissolved in  
4 ml. 1:1  $\text{CaH}_2$ -petr. ether, decolorized with C, 1 ml. petr.  
ether added, the cryst. product discarded and the filtrate  
cooled to -5° to give 0.15 g.  $\text{CICH}_2\text{COCH}_2\text{CH}(\text{CH}_2)\text{CH}_2\text{COCH}_2\text{Cl}$ . II (1 g.), 2.5 g. Zn powder, and 50 ml. 80%  
 $\text{AcOH}$  was heated 0.5 hr. at 60-70°, the mixt. dild. with  
40 ml.  $\text{H}_2\text{O}$ , neutralized with  $\text{Na}_2\text{CO}_3$ , extd. with six 20  
ml. portions  $\text{Et}_2\text{O}$ , the exts. dried, evapd., and the residue  
distd. to give 0.49 g. ( $\text{AcCH}_2\text{CH}_2)_n$ , b.p. 65-75°, m. 34-6°.  
B. Gutekunst

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TOMASIC

✓ Studies in the prothiolactone series. II. Preparation of D,L-succinimido and L- $\alpha$ -( $\beta$ -toluenesulfonamido)- $\beta$ -prothiolactone. D. Fleš, A. Markovac-Prpić, V. Tomasic, and M. Milohnić ("Pliva", Pharm. Chem. Works, Zagreb, Yugoslavia). *Croat. Chem. Acta* 30, 167-71 (1958); cf. *C.A.* 53, 41822 (in English).—A mixt. of 4 g. L- $\text{PhCH}_2\text{SCH}_2\text{CH}(\text{NH}_2)\text{CO}_2\text{H}$  and 2 g. succinic anhydride heated to 180°, the heating disconnected, the inside temp. kept at 180–70° for 20 min., treated with 5 ml. EtOAc, 100 ml.  $\text{C}_6\text{H}_6$  and 30 ml. petr. ether, kept overnight in a refrigerator, the ppt. removed, the solvent evapd., and the residue crystd. from  $\text{C}_6\text{H}_6$  gave 1.2 g. of racemic  $\text{PhCH}_2\text{SCH}_2\text{CH}(\text{CO}_2\text{H})\text{R}$  (R = succinimido throughout) (I), m. 129–30°. I (2 g.) refluxed 1 hr. with 20 ml.  $\text{SOCl}_2$ , excess  $\text{SOCl}_2$  removed *in vacuo*, the residue dissolved in 10 ml.  $\text{C}_6\text{H}_6$ , impurities ptd. with 20 ml. petr. ether, decanted and the solvent evapd. to give 2 g.  $\text{PhCH}_2\text{SCH}_2\text{CH}(\text{COCl})\text{R}$  (II), needles, m. 73–8° ( $\text{C}_6\text{H}_6$ -petr. ether). A soln. of 2 g. II in 250 ml.  $\text{C}_6\text{H}_6$  was added to 5.6 g. AlBr<sub>3</sub> in 50 ml.  $\text{C}_6\text{H}_6$ , the mixt. kept 1 hr. at 20°, hydrolyzed with 30 g.  $\text{K}_2\text{CO}_3$  and 6 ml. concd. HCl, the aq. layer extd. twice with 20 ml.  $\text{C}_6\text{H}_6$ , the  $\text{C}_6\text{H}_6$  layers washed with  $\text{H}_2\text{O}$ , dried, evapd., triturated with petr. ether (0.47 g.  $\text{PhCH}_2$  recovered from petr. ether solns.) and the residue

crystd. from 2:1 EtOAc-petr. ether to yield 0.71 g.  $\text{CH}_3\text{--}\overset{\text{6}}{\text{SjNB}}$

S.CO.CHR (III), m. 95–7°. Similar treatment of L- $\text{PhCH}_2\text{SCH}_2\text{CH}(\text{COCl})\text{NHSO}_2\text{C}_6\text{H}_4\text{Me}-p$  gave 67% L- $\text{CH}_3\text{--S.CO.CHNSO}_2\text{C}_6\text{H}_4\text{Me}-p$  (IV), m. 101–2° ( $\text{C}_6\text{H}_6$ -petr. ether),  $[\alpha]_D^{25} -5.1^\circ$  ( $c$  0.285, dioxane). This hydrolyzed with AcOH and III gave 49.5% L-cystine. IV (0.2 g.) in 15 ml.  $\text{C}_6\text{H}_6$  treated with 10 ml. 5% NaHCO<sub>3</sub> gave a white ppt., which was washed with  $\text{H}_2\text{O}$  and extd. with  $\text{C}_6\text{H}_6$  to give 0.16 g. of a white powder, m. 175–80° (decompn.), sol. in HCONMe<sub>2</sub>, probably a linear polymer, which upon hydrolysis with AcOH and III gave L-cystine. A mixt. of 0.5 g. IV, 0.49 g.  $\text{H}_2\text{NCH}_2\text{CO}_2\text{Me}$ , and 4 ml. dioxane kept overnight at room temp., the solvent evapd. *in vacuo*, the residue dissolved in 50 ml. EtOAc, washed with 50 ml.  $\text{H}_2\text{O}$ , dried ( $\text{MgSO}_4$ ) and the EtOAc evapd. *in vacuo* to give 0.4 g. L-[MeO<sub>2</sub>CCH<sub>2</sub>NHCOCH(NHSO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Me-p)CH<sub>2</sub>S]<sub>n</sub>, m. 177–8.5° (EtOAc),  $[\alpha]_D^{25} 47.5^\circ$  ( $c$  1.82, dioxane). Infrared absorption spectra of III and IV are recorded. The carbonyl band in prothiolactone system seems to appear between 1760 and 1780 cm.<sup>-1</sup>, and C<sub>(hexane)</sub> – N stretching vibration near 1000 cm.<sup>-1</sup> D. Fleš

TCMASIC, V.

Are railroads favored by the Draft Bill on Railroad Transportation at the expense of their users? p. 94. ZILEZNICE. Vol. 11, No. 3, March, 1955. Belgrad.

SOURCE: East European Accessions List (EEAL) Library of Congress, Vol. 4, No. 12, Dec. 1955.

TOMASIC, V.

Insurance system in rail transportation. p. 257. ZHLENICE.  
Vol. 11, No. 7, July, 1955. Belgrad.

SOURCE: East European Accessions List, (EEAL) Library of Congress,  
Vol. 4, No. 12, Dec. 1955.

TOMASIC, V.

The entitled party in a railroad transportation contract. p. 12

ZELEZNICE, Beograd, Vol 12, No. 2, Feb., 1956

SO: EEAL, Vol 5, No. 7, July, 1956

TOMASIC, V.

Modifying a contract covering transportation of goods by rail. p. 4

ZELEZNICE. (Zeleznicki institut GDJZ) Beograd.

Vol. 12, no. 5, May 1956

SOURCE: East European List (EEAL) Library of  
Congress, Vol. 6, No. 1, January 1957.

TOMASIC, Vjekoslav, dr.

Legal aspects of the exploitation of industrial tracks.  
Zeleznice Jug. 19 no. 10:14-21 0'63

TETRASACCHARIDE

*72-Dimethylaminohept-1-enyl* esters of some substituted acrylic acids. N. Stjepanac, V. Tomasic, and D. Lekic. *J. Polym. Sci.*, Zurich, Yugoslavia. *Abstracts Chem.* 26, 335-337 (1954). The HCl salts of esters of Me<sub>2</sub>NCH<sub>2</sub>CH=CHCOOH (I) were prep'd by gradually adding a soln. of I to 10 ml. *Et<sub>2</sub>O*, to a soln. of 23% of HCl in 10 ml. *CH<sub>2</sub>Cl<sub>2</sub>*, refluxing 15 min., keeping over夜, and with petr. ether or *Et<sub>2</sub>O*. The free esters were liberated from aq. solns. of HCl salts with 50% KOH and distg. *in vacuo* as colorless oils. In this way esters of I with following acids were prep'd. (acid used, b.p. of ester, and the salt and its % yield and m.p. of salt given): *BzCO<sub>2</sub>H*, b.p. 90°, neutral oxalate, —, 160-71%; *PhCH<sub>2</sub>CO<sub>2</sub>H*, b.p. 84°, HCl, 31.2, 178%; *Ph<sub>2</sub>CHCO<sub>2</sub>H*, b.p. 115°, HCl, 35.8, 179-81%; *Ph<sub>2</sub>CHCH<sub>2</sub>CO<sub>2</sub>H*, b.p. 112°, HCl, 36.8, 160-67%; *PhCH<sub>2</sub>CO<sub>2</sub>H*, b.p. 78°, neutral oxalate, —, 127-75%; *PhCH<sub>2</sub>COAc*, b.p. > 105°, HCl, 90.7, 140-74%. A soln. of 4.32 g. *Ph<sub>2</sub>CHCO<sub>2</sub>H* in 85 ml. *Et<sub>2</sub>O* was treated with a 25% *NaHCO<sub>3</sub>* soln. in *MeOH*, refluxed 1 hr., with 18.2 g. Mesob. of *MeOK* in *MeOH*, refluxed 1 hr., with the nitrate *NCH<sub>2</sub>MeCH<sub>2</sub>Cl*, the NaCl formed filtered off, the filtrate evapd. *in vacuo*, the residue dissolved in abs. *EtOH*, and neutralized with a soln. of HCl in abs. *EtOH*, and *Et<sub>2</sub>O* added to give 0.24 g. *Ph<sub>2</sub>CHCO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>N(Me)<sub>2</sub>*, HCl, m.p. 195-6°, yield 60%, free ester, m.p. 155°.

TOMASIĆ, Vjekoslav, dr

Legal consequences for inadequate packing of goods forwarded by railroad.  
Železnice Jug 18 no.9/10:1-9 '62.

TOMASIC, Vjekoslav, dr

Legal consequences of accepting damaged goods for railroad  
transport. Zeleznice Jug 18 no.7/8:1-5 '62.

TOMASIC, V.

Insurance in aviation. Medun transp 8 no.8:565-570 Ag :62.

TOMASIC, V.

"Preparation of the diethyl ester of dichloracetamidomalonic acid", p. 103 (Arhiv Za  
Kemi Ju., Vol. 24, 1952, Zagreb)

East European Vol. 2, No 9

SO: Monthly List of ~~xxxxxx~~ Accessions, Library of Congress, September 1953, Uncl.

TOMASICH, B.

Exhibition of the innovations at the Faculty of Medicine of Debrecen University, p. 30, UJITOK LAPJA, (Orszagos Talalmanyi Hivatal) Budapest, Vol. 7, No. 6, Mar. 1955

SOURCE:: East European Accessions List (EEAL) Library of Congress,  
Vol. 4, No. 12, December 1955

TOMASICH, B.

The innovators' movement at the Ganz Railroad Car Factory develops. p. 30,  
UJITOK LAPJA, (Orszagos Talalmányi Hivatal) Budapest, Vol. 7, No. 6, Mar.  
1955

SOURCE: East European Accessions List (EEAL) Library of Congress,  
Vol. 4, No. 12, December 1955

KOWALCZYKOWA, Janina; NIEZABITOWSKI, Aleksander; SZCZUDRAWA, Jerzy;  
TOMASIK, Bronislaw

Morphological and clinical picture of tumors of paraganglionic  
bodies of the parasympathetic system. Nowotwory 15 no.2:115-122  
Ap-Je '65.

1. Z Zakladu Anatomii Patologicznej AM w Krakowie (Kierownik:  
prof. dr. med. J. Kowalczykowa) i z Pracowni Anatomopatolo-  
gicznej Miejskiego Szpitala Socjalistycznego im. dr. Anki w  
Krakowie (Kierownik: dr. B. Tomasik).

KARPOWICZ, M.; BUDNICKI, K.; TOMASIK, H.

Warsaw studies of the velocity body of carbon stars.  
Postepy astronom 10 no.1:69 Ja-M '62.